

WHAT IS CLAIMED IS:

1. An apparatus for making a color filter with a plurality of filter elements aligned on a substrate, comprising:
 - an inkjet head having a nozzle line comprising a plurality of nozzle groups, each of the nozzle groups including a plurality of nozzles;
 - an ink supplying element for supplying a filter material to the inkjet head;
 - a first-scan driving element for moving at least one of the inkjet head and the substrate in a first-scanning direction relative to the other;
 - a second-scan driving element for moving one of the inkjet head and the substrate in a second-scanning direction relative to the other;
 - a nozzle discharge controlling element for controlling the discharge of the filter material from the plurality of the nozzles;
 - a first-scan controlling element for controlling the operation of the first-scan driving element; and
 - a second-scan controlling element for controlling the operation of the second-scan driving element,

wherein at least one of the inkjet head and the substrate is moved in a second-scanning direction relative to the other so that at least a part of each nozzle group is capable of scanning a same section of the substrate in the first direction.
2. An apparatus for making a liquid crystal device, the liquid crystal device comprising:
 - a pair of substrates for enclosing liquid crystal; and
 - a plurality of filter elements aligned on at least one of the substrates, and the apparatus comprising:
 - an inkjet head having a nozzle line comprising a plurality of nozzle groups, each of the nozzle groups including a plurality of nozzles;
 - an ink supplying element for supplying a filter material to the inkjet head;
 - a first-scan driving element for moving at least one of the inkjet head and the substrate in a first-scanning direction relative to the other;
 - a second-scan driving element for moving at least one of the inkjet head and the substrate in a second-scanning direction relative to the other;
 - a nozzle discharge controlling element for controlling the discharge of the filter material from the plurality of the nozzles;

a first-scan controlling element for controlling the operation of the first-scan driving element; and

a second-scan controlling element for controlling the operation of the second-scan driving element,

wherein at least one of the inkjet head and the substrate is moved in a second-scanning direction relative to the other so that at least a part of each nozzle group is capable of scanning a same section of the substrate in the first direction.

3. An apparatus for making an electro-luminescent device, the device comprising a plurality of pixels, each including an electro-luminescent layer, aligned on a substrate, and the apparatus comprising:

an inkjet head having a nozzle line comprising a plurality of nozzle groups, each nozzle group including a plurality of nozzles;

an ink supplying element for supplying a electro-luminescent material to the inkjet head;

a first-scan driving element for moving at least one of the inkjet head and the substrate in a first-scanning direction relative to the other;

a second-scan driving element for moving at least one of the inkjet head and the substrate in a second-scanning direction relative to the other;

a nozzle discharge controlling element for controlling the discharge of the filter material from the plurality of the nozzles;

a first-scan controlling element for controlling the operation of the first-scan driving element; and

a second-scan controlling element for controlling the operation of the second-scan driving element,

wherein at least one of the inkjet head and the substrate is moved in a second-scanning direction relative to the other so that at least a part of each nozzle group is capable of scanning a same section of the substrate in the first direction.

4. A control unit for controlling an inkjet head which is used in making an optical component having a plurality of color patterns aligned on a substrate, comprising:

an inkjet head having a nozzle line comprising a plurality of nozzle groups, each nozzle group including a plurality of nozzles;

an ink supplying element for supplying a electro-luminescent material to the inkjet head;

a first-scan driving element for moving at least one of the inkjet head and the substrate in a first-scanning direction relative to the other;

a second-scan driving element for moving at least one of the inkjet head and the substrate in a second-scanning direction relative to the other;

a nozzle discharge controlling element for controlling the discharge of the filter material from the plurality of the nozzles;

a first-scan controlling element for controlling the operation of the first-scan driving element; and

a second-scan controlling element for controlling the operation of the second-scan driving element,

wherein one of the inkjet head and the substrate is moved in a second-scanning direction relative to the other so that at least a part of each nozzle group is capable of scanning a same section of the substrate in the first direction.

5. An apparatus for discharging a material towards a object, comprising:

a head having a nozzle line comprising a plurality of nozzle groups, each of the nozzle groups including a plurality of nozzles;

an material supplying element for supplying a material to the head;

a first-scan driving element for moving at least one of the head and the object in a first-scanning direction relative to the other;

a second-scan driving element for moving at least one of the head and the substrate in a second-scanning direction relative to the other; and

a nozzle discharge controlling element for controlling the discharge of the material from the plurality of the nozzles,

wherein one of the head and the object is moved in a second-scanning direction relative to the other so that the nozzle group is capable of scanning a same section of the object in the first direction.